

RAMESH, Serial No. 09/703,723

Docket No. 219.39043X00

- P. Bell
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1. (Amended) A circuit for removing noise on a voltage input line, comprising:
 - a ferrite bead connected in the voltage input line, the ferrite bead having a first resistance; and
 - a bulk capacitor connected between an output side of the ferrite bead and ground, the bulk capacitor having a substantially equivalent series resistance to the first resistance.
 2. (Amended) The circuit according to claim 1, wherein the capacitor is a D case tantalum bulk capacitor.
 3. (Amended) The circuit according to claim 2, wherein the capacitor has the series resistance of approximately 0.8 Ohms.
 4. (Amended) The circuit according to claim 1, wherein the ferrite bead has the first resistance of approximately 0.3 Ohms.
 5. (Amended) A voltage supply device comprising:
 - a voltage source including a voltage regulator section producing a voltage output;
 - a ferrite bead connected at one side to the voltage output and forming at another side an output, the ferrite bead having a first resistance; and
 - a capacitor connected between the output and ground, the capacitor having a substantially equivalent series resistance to the first resistance;

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where switching regulator noise from the voltage regulator section is removable by the ferrite bead and capacitor.

6. (Amended) The voltage supply device according to claim 5, wherein the capacitor is a D case tantalum bulk capacitor.

7. (Amended) The voltage supply device according to claim 5, wherein the capacitor has the series resistance of approximately 0.8 Ohms.

8. (Amended) The voltage supply device according to claim 5, wherein the ferrite bead has the first resistance of approximately 0.3 Ohms.

9. (Amended) A method of removing switching regulator noise from a voltage supply line, comprising:

connecting a ferrite bead in the voltage input line, the ferrite bead having a first resistance; and

connecting a bulk capacitor between an output side of the ferrite bead and ground, the capacitor having a substantially equivalent series resistance to the first resistance.

10. (Amended) The method according to claim 9, wherein the capacitor is a D case tantalum bulk capacitor.

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11. (Amended) The method according to claim 10, wherein the capacitor has the series resistance of approximately 0.8 Ohms.

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12. (Amended) The method according to claim 9, wherein the ferrite bead has the first resistance of approximately 0.3 Ohms.

13. (Amended) A voltage source for a clock circuit, comprising:
a voltage regulator having a regulator output;
a ferrite bead connected to the regulator output of the voltage regulator and having an output, the ferrite bead having a first resistance; and

a bulk capacitor connected to the output of the ferrite bead at one side and ground at another side, the bulk capacitor having a substantially equivalent series resistance to the first resistance;

wherein the ferrite bead and capacitor act to remove switching regulator noise so as to produce an input voltage supply having a reduced switching regulator noise for the clock circuit.

14. (Amended) The voltage source according to claim 13, wherein the capacitor is a D case tantalum bulk capacitor.

15. (Amended) The voltage source according to claim 14, wherein the capacitor has the series resistance of approximately 0.8 Ohms.

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16. (Amended) The voltage source according to claim 13, wherein the ferrite bead has the first resistance of approximately 0.3 Ohms.

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17. (New) The circuit according to claim 1, wherein the ferrite bead and the capacitor are provided in an "L" shaped filter configuration.

18. (New) The circuit according to claim 1, wherein the ferrite bead and the capacitor form a resistor divider circuit to assist in noise signal removal.

19. (New) The voltage supply device according to claim 5, wherein the ferrite bead and the capacitor are provided in an "L" shaped filter configuration.

20. (New) The voltage supply device according to claim 5, wherein the ferrite bead and the capacitor form a resistor divider circuit to assist in noise signal removal.

21. (New) The method according to claim 9, wherein the ferrite bead and the capacitor are provided in an "L" shaped filter configuration.

22. (New) The method according to claim 9, wherein the ferrite bead and the capacitor form a resistor divider circuit to assist in noise signal removal.

23. (New) The voltage source according to claim 14, wherein the ferrite bead and the capacitor are provided in an "L" shaped filter configuration.